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(12) ABSTRACT OF INVENTION

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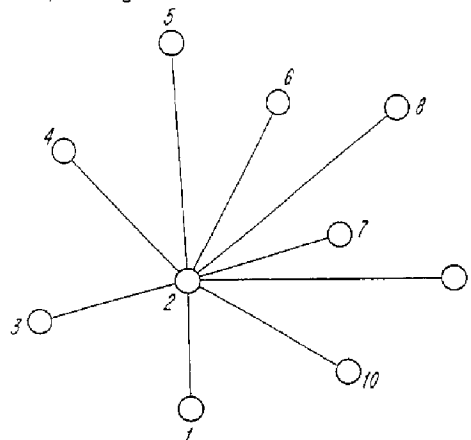
(54) UNCOORDINATED MULTIPLE-USER FREQUENCY-JUMP WIRELESS PICO-CELL SYSTEM

(57) Abstract:

FIELD: wireless communication networks.

SUBSTANCE: wireless network has driving device and slave devices. Driving device transmits its address and clock signal to slave devices. Communication is effected by means of frequency-jump virtual channel, frequency jump sequence being a function of driving-device address and its phase, a function of driving-device clock signal. Request messages being transmitted require data on addresses of slave devices and layout that may be used to form configuration tree for routing interconnections between driving device and slave devices. Data on addresses of slave devices and layout may include home address of each of slave devices and only lists of first-level addresses from each of slave devices. Configuration tree formation includes organization of hierarchy of connectivity rings from first-level address lists. Each connectivity tree may be formed proceeding from statement that higher-number connectivity ring cannot include devices representing nodes that have been already presented by node in lower-number connectivity ring. As an alternative connectivity ring may be formed considering current-number connectivity ring that has father nodes and including in connectivity

ring bearing next higher number the nodes representing all child nodes of father nodes for neither of descendant nodes of any child node may represent same device as any of child nodes of given father node; and neither of child nodes of any father node may have same name as any other child node of any mentioned father node. EFFECT: provision for optimal use of assigned spectrum for wireless connection of devices. 14 cl, 12 dwg



Фиг. 1